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-- A search of the Sanger Genome Sequencing Center (Cambridge, U.K.) and the Washington University Genome Sequencing Center (St. Louis, MO) sequences in progress revealed a Bacterial Artificial Chromosome (BAC) sequence (bK206c7) that contained matches to the *C. elegans* cosmid open reading frame, C54D2.5, and to the four human chromosome 22 ESTs, H55225, H55617, H55223, H55544. The *C. elegans* C54D2.5 cosmid sequence and the human EST sequences were then used to compare the translation of the bK206c7 BAC genomic sequence in all 6 reading frames. The analysis was performed using the Dotter graphical program (Eric Sohnhammer, NCBI). The analysis revealed a series of potential coding regions on one strand of the bK206c7 BAC sequence. These were subsequently translated in all 3 reading frames and the potential splice junctions identified. The sequence of this longer DNA fragment which is part of the human α_{11} subunit gene is given by SEQ ID NO.18. The translated sequence of this fragment is given by SEQ ID NO. 19.--

Please replace the paragraph beginning at page 14, line 12, with the following rewritten paragraph:

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--Longer portions of DNA-encoding the novel calcium channel subunits of the invention can also be recovered by PCR cloning techniques using primers corresponding to or based upon the EST sequences. Using this technique to identify relevant sequences within a human brain total RNA preparation confirmed that the novel α_{11} calcium channel subunit is present in human brain. Subcloning of the 567 nt PCR product and subsequent sequencing thereof showed that this product corresponds to the derived sequence from the bK206c7 BAC genomic sequence. The nucleotide sequence is given as SEQ ID NO. 20, corresponding amino acid sequence is given as SEQ ID NO. 21. The same experiment was performed using a rat brain RNA preparation and resulted in recovery of a substantially identical PCR product (SEQ ID NO. 22). Corresponding amino acid sequence is given as SEQ ID NO. 23. The protein encoded by the rat PCR product is 96% identical to the human PCR product.--